Apr 10th, 9:00 AM - 10:00 AM

Electrochemical Etching Technique for Fabricating Tungsten Nanotips

Thomas Bersano
Illinois Wesleyan University

Bruno deHarak, Faculty Advisor
Illinois Wesleyan University

Poster Presentation P7

ELECTROCHEMICAL ETCHING TECHNIQUE FOR FABRICATING TUNGSTEN NANOTIPS

Thomas Bersano and Bruno deHarak*
Physics Department, Illinois Wesleyan University

This work will describe an electrochemical etching technique for fabricating sharp metal tips. The tips have diameters between 100-500 nm. I will discuss some of the factors that affect the sharpness of the tips. Tips of this size can be used in scanning tunneling microscopy and atomic force microscopy. Typically these techniques are used to image surfaces with atomic resolution. However, we will use the tips to create short pulses of electrons to study molecular dynamics at short time scales.